Instructional Strategies for Mathematics Success

A Professional Learning Opportunity for District or School Based Cohorts of K-12 Teachers



Overview

This series of professional learning sessions focuses on increasing teacher knowledge and confidence in using research-based practices for the mathematics classroom. The strategies shared will provide immediate support for the many challenges teachers and learners have faced due to the COVID-19 pandemic.

The foundation of the sessions is based on using mathematics learning progressions and worthwhile tasks to measure student proficiency and identify gaps in mathematics learning and design instruction to address learner needs.



Session Topics

Using Learning Progressions to Guide Instruction - Participants will examine research and the SCCCR standards to create learning progressions. Learning progressions, assessment tasks, and student work will be analyzed to identify current student understanding and next steps for instruction.

Differentiation with Low Floor, High Ceiling Tasks - Participants will understand characteristics of worthwhile mathematics tasks and analyze parallel tasks and open ended tasks to classify responses according to learning progressions. Participants will create tasks to use in their classrooms.

High Yield Math Routines for Ongoing Practice - Participants will recognize instructional routines to provide ongoing practice and review of mathematics concepts to support retention.

Communicating Thinking with Virtual Manipulatives - Participants will explore virtual manipulatives and learn strategies for incorporating them into mathematics lessons.

Developing Mathematics Literacy -Participants will engage in strategies to incorporate literacy into mathematics classes, including vocabulary development and facilitating mathematics discussions.

Customized Options

The professional learning series is designed to be flexible to the needs of the district or school and can be customized to address identified priorities while maintaining the core learning of best instructional practices. Sessions are suited for delivery to grade band groups (K-2, 3-5, 6-8 or 9-12) of classroom teachers and can be delivered in a virtual, hybrid or on-site setting.

The ideal implementation would support teachers by providing time between sessions to practice and reflect on their applied learning.

Districts and schools have the option to extend and complement the learning series through on-site PLCs and skilled coaching from teacher leaders, administrators or S²TEM Centers SC specialists to encourage reflection and discussion of the successes and challenges of implementation.

Contact Info

Email: solutions@s2temsc.org Website: www.s2temsc.org/continuingeducation-courses

